



Kirk Westphal
Susan Morea
Elaine Sistare
Bernadette Kolb
Joe Laliberte
David Murphy
Scott Bighinatti

June 29, 2016

New England Interstate Water Pollution Control Commission

Development of the State Water Plan for Connecticut

**CDM
Smith**

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Meeting Objectives

- Summarize Project Quality Management Meeting
- Review Project Scope (Phase I)
- Roles and Responsibilities
- Report on Ongoing and Upcoming Tasks (Phase I)
- Confirm Communication Protocols
- Review Project Schedule (Phase I and II)



Project Quality Management Summary

What is PQM?

- ***Step back from specific project details and look at the big picture***
 - What is the project going to accomplish?
 - Why is it important?
 - What do we need to ensure success?
 - What might hamper our success and how do we deal with it?
- ***Process is a team approach***
 - Active participation
 - Develop a thorough understanding of the project
 - Team commitment to project success

Purpose of PQM

- Clarify key project stakeholders roles and responsibilities
- Develop a clear understanding of the purpose, goals/objectives and expectations of the project
- Develop consensus on the most important factors (CSFs) necessary to ensure a successful project
- Develop plan of action and schedule (PATs, processes, activities and tasks) that will help the project team meet the project objectives

Mission Statement (DRAFT)

The CDM Smith team, working with the Connecticut Water Planning Council, will produce a State Water Plan for approval by the State Legislature that builds on, and advances the ongoing work of the Council, its Steering Committee, Work Groups, and Advisory Group. The Plan will identify water management issues and opportunities for which consensus policy recommendations could be achieved by stakeholders before March 2017, and as applicable, will provide recommendations for legislative or regulatory changes. Where consensus is not a reasonable expectation for certain issues, the Plan will outline pathways forward that may include additional information needs, decision processes, and a recommended management framework to guide the continuing work. Consumptive and non-consumptive issues to be discussed and advanced, with consideration of economic impacts, public health and safety, and environmental impacts, may include, but are not necessarily limited to;

- *Regionalization and system interconnections/expansions*
- *Climate change adaptation*
- *Use of reclaimed water for non-potable needs*
- *Conservation practices and increased use of non-potable natural water for irrigation and industry*
- *Non-consumptive water needs for ecology and recreation*
- *Aging infrastructure*
- *Interbasin transfers*
- *Capacity of water systems to meet demand*
- *Agricultural practices*
- *Registered diversions*

This process will include participation from stakeholders and will be transparent and understandable to the citizens of Connecticut.

Critical Success Factors: PROJECT MANAGEMENT

- We must clarify the critical path and assign a dedicated team to meet scope and achieve the aggressive schedule within the project budget.

Critical Success Factors: PROTOCOLS

- We must establish a decision-making framework and communication protocols allowing for all input to be heard and catalogued. Recognizing that not everyone will agree by March 2017, identify which water management issues have consensus for resolution and which are unresolved and require future paths forward.

Critical Success Factors: DATA

- We must obtain, in a timely manner, and utilize current, scientifically defensible data and analysis techniques with appropriate documentation of sources.
- We must consider data at an appropriate scale to the state water plan; and present in such a manner that is acceptable to the data suppliers and understandable to the public.

Critical Success Factors: STAKEHOLDERS

- We need to identify as many stakeholders as possible, communicate to them what the process entails and invite them to get involved in various components of the project including providing input, asking questions, and reviewing outcomes.
- We must also provide timely updates, information, and status of the project.

Critical Success Factors: DECISION MAKING

- We need balance to ensure that all stakeholder interests and potential impacts of decisions are given due weight.
- We must achieve project goals and make group decisions on schedule in a manner that is definitive and inclusive.

Critical Success Factors: OUTCOMES

- We must develop water supply objectives that balance the factors in the legislation which include, but not limited to:
 - Supply reliability
 - Public health and safety
 - Environmental and recreational needs
 - Use and expansion of infrastructure
 - Incentives for conservation and reuse.
- We must determine a path forward to resolve conflicts through a consistent and fair decision making process based on facts and data
- We must create a plan that can be adopted and implementable, and include incentives for adoption of policies and provide a mechanism for updates.

Critical Success Factors: FINAL REPORT

- We need an easy-to-read, implementable report and executive summary that the WPC and Legislature can understand and approve.

Critical Success Factors: POLITICAL PROCESS

- We must demonstrate the value of the plan and build open, balanced political support while acknowledging it may not solve all of Connecticut's water issues.

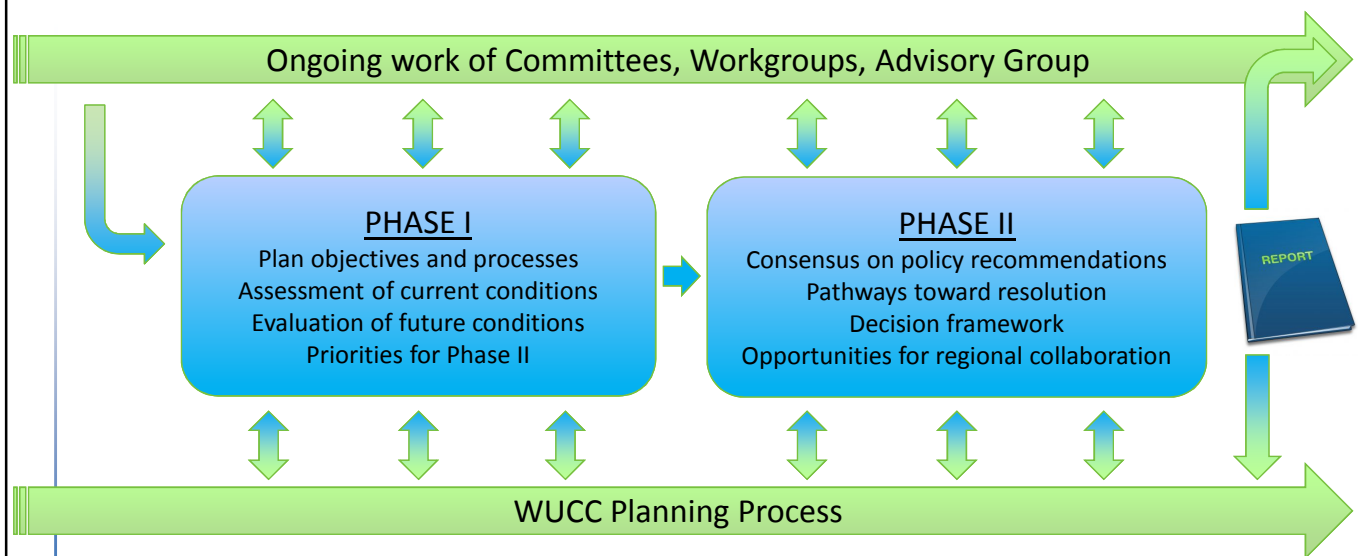


Review of Scope

Basis of Scope

- Build on work to date of Committees and Advisory Group
- 17 Primary Goals outlined in RFQ
- Annotated Table of Contents developed by the Other States' Plans Workgroup (OSPW)

Phasing of Plan Development



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Task Categories

		PHASE I	PHASE II
A	Stakeholders	<ul style="list-style-type: none"> 1 Workshop 3 Public Meetings Others as needed 	<ul style="list-style-type: none"> 5 Workshops 3 Public Meetings Others as needed
B	Policy Issues	<ul style="list-style-type: none"> Policy Assessment 	<ul style="list-style-type: none"> Alternatives Policy Recommendations Paths Forward
C	Analytical Support	<ul style="list-style-type: none"> Demand Water Availability Climate Impacts 	<ul style="list-style-type: none"> Alternatives Assessment Analytical Support
D	Documentation	<ul style="list-style-type: none"> White Papers Fact Sheet on Process Interim Report 	<ul style="list-style-type: none"> White Papers Fact Sheet on Decisions Draft Final Report

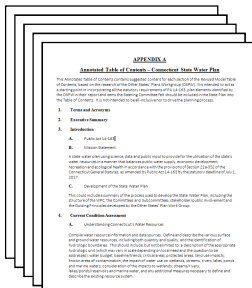
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Mapping the Annotated TOC: PHASE I

Annotated TOC



Task Categories

	PHASE I	PHASE II
A Stakeholders	<ul style="list-style-type: none"> 1 Workshop 3 Public Meetings Others as needed 	<ul style="list-style-type: none"> 3 Workshops 3 Public Meetings Others as needed
B Policy Issues	<ul style="list-style-type: none"> Policy Assessment 	<ul style="list-style-type: none"> Alternatives Policy Recommendations Path Forward
C Analytical Support	<ul style="list-style-type: none"> Demand Water Availability Climate Impacts 	<ul style="list-style-type: none"> Alternatives Assessment Analytical Support
D Documentation	<ul style="list-style-type: none"> White Papers Interim Report 	<ul style="list-style-type: none"> White Papers Draft Final Report

[PLANNING]

Stakeholder

Activities

TASK 1A

Facilitated Mte #1
WPC Steering Comm & Others
- Regions, scale, other stakeholders,
priorities for Phase II

Public outreach and education (6H, partial) - Includes 3 public meetings

Coordination with WUCC planning processes (up to 1 meeting, and coordination with MMI)

Attend WPC Steering Committee Meetings and Subcommittee Meetings (Policy, Science and Technical)

[PLANNING]

Policy and

Alternatives

Tasks

TASK 1B

Current Water Resources
Management Structure (4C)

Current conservation plans,
economic development plans,
etc. (5D, partial)

Summarize potential water
management alternatives
(touches multiple sections)

ID conflicts and
challenges (4D)

[ANALYTICAL]

Data and

Current Conditions

TASK 1C

Public Act Summary
(3A)

Inventory of Water
Resources (4A)

Infrastructure
Capacity & planned
impr. (5A partial)

Data gaps, needs, &
issues (4D partial,
6C partial)

[ANALYTICAL]

TASK 1C

Current Demands
(4B)

Future Demands
(5A)

[ANALYTICAL]

Future Conditions

and Impacts

TASK 1C

Future nonconsumptive uses
(4B)

Climate Change
(5E partial)

Supply and Demand
Comparison

[DOCUMENTATION]

Reports and

Memoranda

TASK 1D

Meeting Notes and Summaries

Draft Interim Report
(3, 4, 5 partial, 6 partial)



Roles and Responsibilities

Roles and Responsibilities

NEIWPCC and the Water Planning Council

Senior Technical Advisors

Mark A. Maimone, Ph.D., PE, D WRE, BCEE
Richard Palmer, Ph.D.
Philip Singer, Ph.D.



Project Director

Susan C. Morea

Project Manager

Kirk S. Westphal, PE



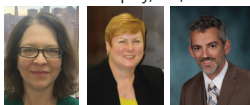
Principal-in-Charge

Joseph Laliberte, PE, BCEE



Task 1A: Stakeholders and Outreach

Elaine C. Sistare, PE, BCEE
Claire R. Baldwin, DPS
David Murphy, PE, CFM



Task 1B: Policy Assessment

Susan C. Morea



Task 1C: Data and Analytical Support

John D. Boyer, PE, BCEE



Task 1D: Documentation

Kirk S. Westphal, PE



Current and Upcoming Tasks: Phase I

Task 1A: Stakeholders and Outreach

- **COMPLETE:** PQM Workshop – Completed June 29
- Facilitated Workshop – Fall of 2016
 - Regions/Scales
 - Stakeholder ID
 - Priorities for Phase II
- Meetings with Other Stakeholders (as needed)
- 3 Public Meetings to disseminate information and answer questions (same topics/themes, divided geographically)
- **NEXT STEP:** Fact sheet on the planning process for existing state website
- **ONGOING:** Attend regular WPC SC, WPCAG, Policy Subcommittee, and Sci/Tech Subcommittee meetings
- **ONGOING/NEXT STEP:** Coordination with WUCC Process: Attended kickoff meetings, will review progress/objectives/processes/data with MMI

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Facilitated Stakeholder Workshops

PHASE I

- Plan Framework:
 - Regions
 - Scale
 - Stakeholder ID
 - Priorities

PHASE II

- Alternatives
- Policy vs. Pathways
- Paths Forward
- Policy Recommendations
- Plan Recommendations

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Task 1B: Current Policy Assessment

PHASE I

- **NEXT STEP:** Management Structure
- **NEXT STEP:** Conservation Plans and Economic Development Trends
- Identify Water Management Alternatives for Phase II
- Conflicts and Challenges

- *White papers will be issued for each topic*
- *MMI's familiarity with CT history will be very helpful*

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Task 1C: Technical Condition Assessment

PHASE I

- Water Supply Inventory
- Infrastructure Summary
- Water Demands
 - Consumptive
 - Nonconsumptive
 - Current
 - Future
- Climate Impacts
- Data Gaps

PHASE II

- Alternatives Assessment
- Water Conservation
- Climate Resiliency

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Task 1C (cont'd): Technical Evaluations

- **ONGOING:** Data Quality Plan (per NEIWPCC guidelines)
 - “Secondary Data” usage
 - Ensure data are traceable and procedures documented
 - Caveat data as necessary (with consistent classifications for use)
 - Will not use any data until Data Quality Plan is approved by NEIWPCC and participating committees
- **NEXT STEP:** Water Resources Inventory (current status)
 - Quantity and quality
 - Surface water and groundwater
 - Based on available information, may be regionalized for study purposes and dissemination
- **NEXT STEP:** Infrastructure Capacity and Planned Improvements
 - Storage
 - Interconnections
 - Reclaimed water
 - Etc.

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Task 1C (cont'd): Technical Evaluations

- **NEXT STEP:** Demand Assessment
 - Current
 - Future
 - Consumptive
 - Non-consumptive
- **Climate Change Assessment**
 - Potential climate trends
 - Relative impacts on state’s water resources and infrastructure

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Phase I Documentation and Key Deliverables

- Meeting notes and summaries
- Approved Data Quality Plan
- Fact Sheet about the planning process for website
- White papers on current policy assessment (*will become report sections*)
- Technical memoranda on supply, demand, infrastructure, data gaps, climate change (*will become report sections*)
- Interim Report on Planning Framework (Phase I)



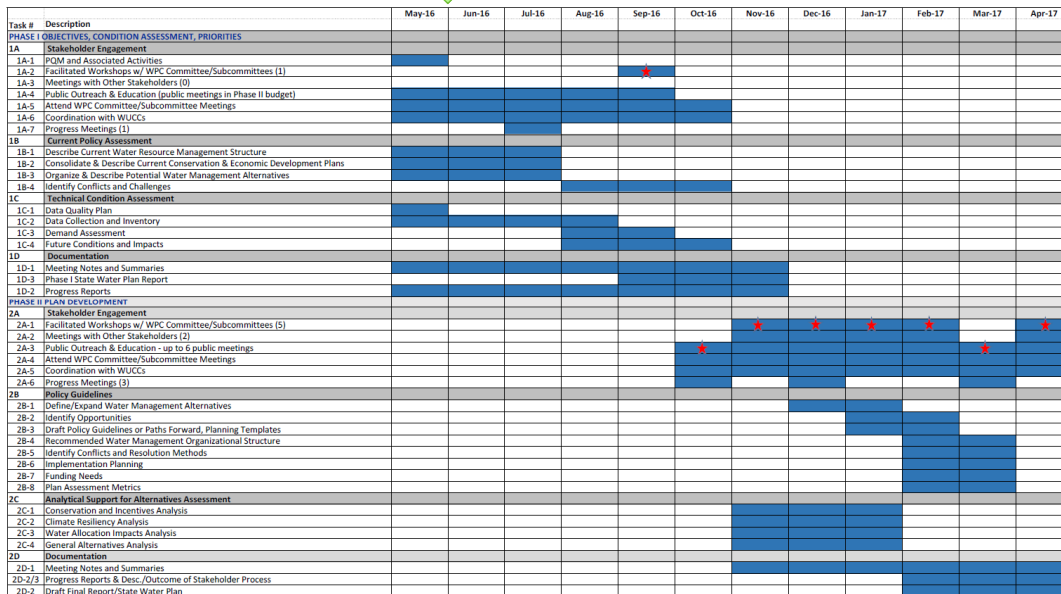
Administrative Issues

Communication Protocols

- All deliverables, formal or informal, will be distributed through NEIWPCC
- All communication shall be directed through NEIWPCC, with relevant parties copied

Project Schedule

Actual start date





THANK YOU

Kickoff Meeting

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